

Notice of Allowability

Application No.

09/483,321

Examiner

Herng-der Day

Applicant(s)

SWOBODA, GARY L.

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment received 7/21/04.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 03 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JEAN A. HOMERE
PRIMARY EXAMINER

DETAILED ACTION

1. This communication is in response to Applicant's Amendment to Office Action dated April 22, 2004, faxed July 21, 2004.

1-1. Claims 6, 8, and 12 have been amended. Claims 1-12 are pending.

1-2. Claims 1-12 have been examined and allowed.

Reasons for Allowance

2. The following is an Examiner's statement of reasons for allowance:

2-1. The closest prior art of record discloses:

(1) A hierarchical test access port architecture for electronic circuits (Bhattacharya, U.S. Patent 6,378,090 B1);

(2) A method for debugging an integrated circuit using extended operating modes (Swoboda, U.S. Patent 5,828,824); and

(3) A format of a state inquiry message with synchronizing bits, 1 start bit, and followed by a predetermined number of data bits (Oh et al., U.S. Patent 6,037,868).

2-2. Independent claim 1 is directed at a method for emulation communications via a test data input port and boundary-scan architecture. This independent claim identifies the distinct combination of features of "supplying to the test data input port for communication to the boundary-scan architecture a serial signal having a number of bits greater in number than a number of bits of the serial connection of the plurality of registers, each bit of said serial signal having a first logic state" and "following supply of said serial signal, supplying to the test data

Art Unit: 2128

input port for communication to the boundary-scan architecture a single_start bit having a second logic state opposite to said first logic state followed by a predetermined number of data bits” as described in lines 17-30, page 18 of the specification and as shown in Figure 7. The closest prior art does not teach or reasonably suggest using the alternate data transfer protocol for communication to the boundary-scan architecture. Claim 1 and its dependent claims 2-5 are deemed allowable.

2-3. Independent claim 6 is directed at a digital electronic module. This independent claim identifies the distinct combination of features of each individual hardware component utilizing the alternate data transfer protocol as described in the specification in line 31 of page 18 through line 17 of page 19 and as shown in Figure 7 and Figure 8. The closest prior art does not teach or reasonably suggest using the alternate data transfer protocol in this specific digital electronic module. Claim 6 and its dependent claims 7-12 are deemed allowable.

3. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (703) 305-5269. The Examiner can normally be reached on 9:00 - 17:30.

Art Unit: 2128

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jean Homere can be reached on (703) 308-6647. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Herng-der Day *H.D.*
September 3, 2004

J. Homere
JEAN R. HOMERE
PRIMARY EXAMINER